

Sub B1
Contd

a1

phosphate formulated as an injectable paste having a solids content of greater than 40 wt%.

13. (Amended) A method for stimulating an immune response in a mammal, said method comprising:

a2

administering to the mammal a composition comprising amorphous calcium phosphate formulated as an injectable paste having a solids content of greater than 40 wt%.

Sub B3

14. (Amended) A method for increasing the immunogenicity of an antigen in a mammal, said method comprising:

co-administering both [the] an antigen and a composition comprising amorphous calcium phosphate formulated as an injectable paste having a solids content of greater than 40 wt %.

15. (Amended) An immunological adjuvant composition useful for enhancing the immune response against antigens, comprising:

a first adjuvant, where said first adjuvant comprises a self-setting, hardenable calcium phosphate composition [poorly crystalline apatitic calcium phosphate].

a3

26. (Amended) A method for stimulating an immune response in a mammal, said method comprising:

administering to the mammal a composition comprising a self-setting, hardenable calcium phosphate composition [poorly crystalline apatitic calcium phosphate].

Sub B4

27. (Amended) A method for increasing the immunogenicity of an antigen in a

Sub 24
Cont'd

mammal, said method comprising:

co-administering both the antigen and a composition comprising a self-setting, hardenable calcium phosphate composition [poorly crystalline apatitic calcium phosphate].

28. (Amended) An immunological adjuvant composition useful for enhancing the immune response against antigens, comprising:

a first adjuvant, where said first adjuvant comprises calcium phosphate; and
[an adjuvanticity enhancing means wherein said enhancing means is selected from the group consisting of exogenous enhancing means and endogenous enhancing means] a second adjuvant, wherein the first and second adjuvant are selected to elicit a response of a specific immune cell type.

33. (Amended) A composition of claim [32] 9, 22 or 28, wherein said second adjuvant is selected from[:]
the group consisting of a second calcium phosphate, muramyl peptide, aluminum hydroxide, aluminum phosphate, hydroxyapatite, Incomplete Freund's Adjuvant, Complete Freund's Adjuvant and polymers.

37. (Amended) A method for stimulating an immune response in a mammal, said method comprising:

administering to the mammal a composition comprising calcium phosphate and [an adjuvanticity enhancing means] a second adjuvant, wherein the first and second adjuvant are selected to elicit a response of a specific immune cell type.

Please add the following new claims 38-44.

38. (Newly added) The composition of claim 1, 15 or 28, further comprising an

endogenous adjuvanticity enhancing means.

39. (Newly added) The composition of claim 15, wherein the calcium phosphate composition forms a poorly crystalline apatitic calcium phosphate.

40. (Newly added) The composition of claim 28, wherein the first and second adjuvant are selected to elicit an immunological response in the same immune cell type.

41. (Newly added) The composition of claim 28, wherein the first and second adjuvant are selected to elicit an immunological response in different immune cell types.

42. (Newly added) The method of claim 37, wherein said second adjuvant is selected from[:] the group consisting of a second calcium phosphate, muramyl peptide, aluminum hydroxide, aluminum phosphate, hydroxyapatite, Incomplete Freund's Adjuvant, Complete Freund's Adjuvant and polymers.

43. (Newly added) The composition of claim 23, wherein the antigen is introduced into the adjuvant composition prior to hardening.

44. (Newly added) The composition of claim 23, wherein the antigen is adsorbed onto the adjuvant composition after hardening.

Duplicate

Remarks

I. Applicant's Invention,

The invention is directed to immunological adjuvant composition useful for enhancing the immune response against antigens. The adjuvant composition includes a